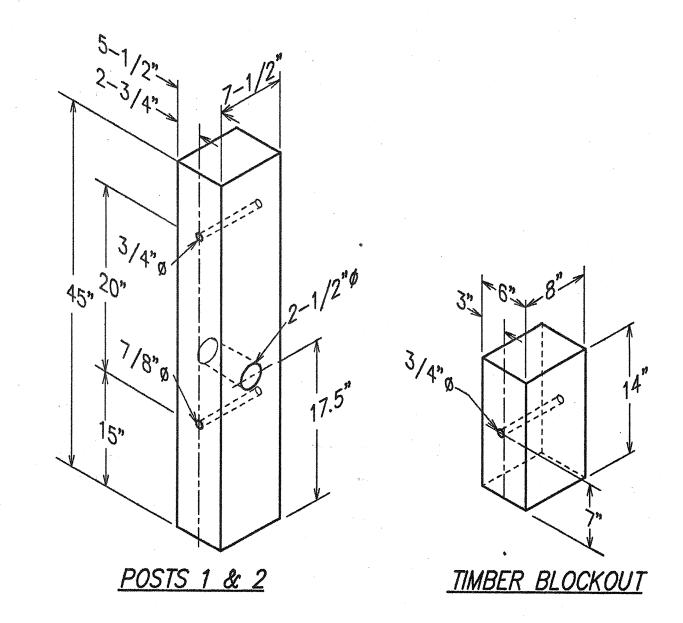
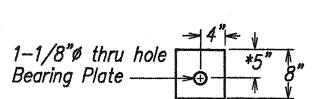


at Post #2

GENERAL NOTES

- 1. Wood posts are required with the fleat.
- 2. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
- 3. The soil tube shall not protrude more than 4" above ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
- 4. The soil tubes may be driven with an approved driving head. They shall not be driven with the wood post in the tube. If the soil tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent settlement.
- 5. When rock is encountered during excavation, a 12" Dia. post hole, 20" deep may be used if approved by the engineer. Granular material will be placed in the bottom of the hole approx. 2 1/2 " deep to provide drainage. The soil tubes will be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
- 6. The breakaway cable assembly must be taut. A locking device, (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening nuts.
- 7. The wood blockouts shall be "toe nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.
- 8. For curb installations, the soil tubes and posts shall be installed at the proper ground elevation behind the curb. The posts will require field drilling new holes to accommodate the rail to the post connecting bolt to maintain the proper height of the rail above the gutter pan. The excess post length above the rail will be removed if directed by the engineer.





typical @ Post 3 - 7

*for bearing plate placement, the 5" side should be installed up

BEARING PLATE E750

200				•	LLMIOOU	4/14/99 GAI
	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	HAWAII	HAW.	IM-STP-0750(10)	1999	34	97

	ITEM NO.	QTY	BILL OF MATERIALS
-	S3000	1	IMPACT HEAD
	F1303	1	W-BEAM GUARDRAIL END SECTION, 12 GA.
	F1304	1	W-BEAM GUARDRAIL CENTER SEC., 12 GA.
	G1203	1	W-BEAM GUARDRAIL, 12 GA.
	<i>\$730</i>	2	*FOUNDATION SOIL TUBE, 6" x 8" x 6'
	E740	1	PIPE SLEEVE
	E750	1	BEARING PLATE, 8" x 8" x 5/8 "
	<i>S760</i>	1	CABLE ANCHOR BOX
	E770	1	BCT CABLE ANCHOR ASSEMBLY
	E780	1	GROUND STRUT
	P650	2	5.5" x 7.5" x 45" WOOD POSTS
	P671	5	6" x 8" x 6' WOOD CRT POST
	P675	5	6" x 8" x 14" TIMBER BLOCKOUT
			9
			HARDWARE
.	B580122	24	5/8" Dia. x 1 1/4" SPLICE BOLT
	<i>B580754</i>	2	5/8" Dia. x 7 1/2" HEX BOLT
	B581004	2	5/8" Dia. x 10" HEX BOLT
	<i>B581002</i>	1	5/8" Dia. x 10" H.G.R. BOLT (POST 2 ONLY)
	B581802	5	5/8" Dia. x 18" H.G.R. BOLT (POST 3-7)
	N050	34	5/8" Dia. H.G.R. NUT (SPLICE 24, SOIL TUBES 2, STRUT POST 2, 1; POST 3 THRU 7, 5.)
	W050	10	5/8" Dia. H.G.R. WASHER
	N100	2	1" ANCHOR CABLE HEX NUT
	W100	2	1" ANCHOR CABLE WASHER
	E350	2	3/8" x 3" LAG SCREW
	SB58A	8	CABLE ANCHOR BOX SHOULDER BOLTS
	N055A	8	1/2" A325 STRUCTURAL NUTS
	W050A	16	1-1/16" OD x 9/16" ID A325 STR. WASHER

*6'-0" Split Foundation Tubes S730 *6'-0" Solid Foundation Tubes E731 *5'-0" Foundation Tubes S735 W/Soil Plates SP600 *4'-6" Foundation Tubes E735 W/Soil Plates SP600



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION Cay OOLL ParEn, Inc. dba PARK ENGINEERING

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

<u>FLEAT-350</u>

FLARED ENERGY ABSORBING TERMINAL

KUNIA ROAD WIDENING: AND H-1. KUNIA I.C., RAMP KO WIDENING F.A.I. PROJECT NO. IM-STP-0750(10)

SCALE: AS NOTED DATE: APRIL 1999 SHEETS

SHEET No. 1 OF

SPACE SECTION

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